

**ABSTRACT**

A method and system for utilizing a self-similarity technique to process an image is disclosed. In accordance with embodiments of the present invention, an image is processed utilizing an image processing technique based on a self-similarity assumption. Through the use of the method and apparatus in accordance with the present invention, imperfections that are present in a degraded image can be compensated for in a simple, fast and non-iterative fashion thereby resulting in a higher quality image. A first aspect of the present invention is a method for utilizing a self-similarity technique to process an image. The method includes obtaining a corrupted image, altering the corrupted image to obtain an altered image, determining a plurality of parameters of a parametric mapping operator for mapping the altered image into the corrupted image and utilizing the plurality of parameters to map the corrupted image into an output image.